

**Request  
For  
Continued Examination (RCE)  
Transmittal**

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<i>Application Number</i>	09/266,680
<i>Filing Date</i>	March 11, 1999
<i>First Named Inventor</i>	Jeff Young et al.
<i>Group Art Unit</i>	2176
<i>Confirmation No.</i>	6131
<i>Examiner Name</i>	William Bashore
<i>Attorney Docket Number</i>	07844-292001

**This is a Request for Continued Examination (RCE) under 37 C.F.R. §1.114 of the above-identified application.**

Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. See Instruction Sheet for RCEs (not to be submitted to the USPTO) on page 2.

- Submission required under 37 C.F.R. §1.114** Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s)
  - ☐ Previously submitted. If a final Office action is outstanding, any amendment filed after the final Office action may be considered as a submission even if this box is not checked.
    - ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on \_\_\_\_\_
    - ☐ Other \_\_\_\_\_
  - ☒ Enclosed
    - ☒ Amendment/Reply
    - ☐ Affidavit(s)/Declaration(s)
    - ☐ Information Disclosure Statement (IDS)
    - ☐ Other \_\_\_\_\_
- Miscellaneous**
  - ☐ Suspension of action on the above-identified application is requested under 37 C.F.R. §1.103(c) for a period of \_\_\_\_\_ months. (Period of suspension shall not exceed 3 months; Fee under 37 C.F.R. §1.17(i) required)
  - ☐ Other \_\_\_\_\_
- Fee** The RCE fee under 37 C.F.R. §1.17(e) is required by 37 C.F.R. §1.114 when the RCE is filed.
  - ☒ The Director is hereby authorized to charge the following fees, or credit any overpayments, to Deposit Account No. 06-1050
    - ☒ RCE fee required under 37 CFR 1.17(e) (\$790.00)
    - ☒ Extension of time fee (37 CFR 1.136 and 1.17) (1-Month Extension Fee: \$120.00)
    - ☒ Other Any deficiencies
  - ☒ The fee in the amount of \$910.00 is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization.
  - ☐ Payment by credit card (Form PTO-2038 enclosed)

**SIGNATURE OF APPLICANT, ATTORNEY OR AGENT REQUIRED**

<i>Name (Print/Type)</i>	Barbara A. Benoit	<i>Registration No. (Attorney/Agent)</i>	54,777
<i>Signature</i>		<i>Date</i>	March 14, 2006

**CERTIFICATE OF MAILING OR TRANSMISSION**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 or facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	: Jeff Young et al.	Art Unit	: 2176
Serial No.	: 09/266,680	Examiner	: William Bashore
Filed	: March 11, 1999	Confirmation No.:	6131
Title	: METHOD OF CONSTRUCTING A DOCUMENT TYPE DEFINITION FROM A SET OF STRUCTURED ELECTRONIC DOCUMENTS		

**Mail Stop Amendment**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

AMENDMENT

Please amend the above-identified application as follows:

**Amendments to the Claims** are reflected in the listing of claims which begins on page 2 of this paper.

**Remarks/Arguments** begin on page 8 of this paper.

**Amendments to the Claims:**

This listing of claims replaces all prior versions and listings of claims in the application:

**Listing of Claims:**

1-13 (Cancelled)

14. (Currently Amended) A computer executable method comprising:

receiving as input a first source document and a first document type definition for the first source document, the first source document conforming to the first document type definition;

receiving as input a target document type definition, the target document type definition being different from the first document type definition;

comparing the first document type definition and the target document type definition to identify common patterns, common patterns being patterns common to the first document type definition and target document type definition, wherein identifying common patterns includes identifying an element that is common to the first and the target document type definitions but has a different name in the first document type definition than in the target document type definition; and

using the common patterns identified by comparing the first and the target document type definitions to map ~~automatically~~ without user intervention elements and sub-elements of the first document type definition in the first source document to recode the first source document according to the target document type definition to equivalent elements and sub-elements, including changing a first tag name of a first element in the first source document to a different second tag name.

15. (Cancelled)

16. (Previously Presented) The method of claim 14, wherein:

the target document type definition was derived automatically from one or more second documents.

17. (Previously Presented) The method of claim 14, wherein:

receiving the first document type definition comprises producing the first document type definition for the first source document if the document type definition for the first source document does not already exist.

18. (Original) The method of claim 14, wherein identifying common patterns comprises:

performing pattern matching between structures defined by the first document type definition and structures defined by the second document type definition.

19. (Cancelled)

20. (Previously Presented) The method of claim 14, wherein identifying common patterns further comprises:

using heuristics to find common structure in the first document type definition and the second document type definition.

21. (Cancelled)

22. (Currently Amended) A computer executable method of converting the format of a source document to the format of a set of source documents, the set of source documents having the first source document, the method comprising:

identifying patterns common to the source document and the set of source documents, wherein identifying patterns includes identifying an element that is common to the first and second source documents but has a different name in the first source document than in the second source document;

mapping, without user intervention, elements and sub-elements in the common pattern of the source document to equivalent elements and sub-elements in the common pattern of the set of source documents, including mapping a first element in the first source document to a second

element in the second source document based on the identified common patterns, the first element and the second element having different element names; and

replacing tag names for the each of the elements and sub-elements in the common pattern of the source document with the equivalent tag names of the elements and sub-elements in the common pattern of the set of source documents.

23. (Previously presented) The method of claim 22, wherein identifying patterns common to the source document and the set of source documents comprises:

examining document type definitions for the source document and the set of source documents.

24. (Original) The method of claim 23, further comprising:

producing the document type definition for the source document if the document type definition for the source document does not already exist.

25. (Currently Amended) A computer program residing on a computer-readable medium, the computer program comprising instructions operable to cause a computer system to:

receive as input a first source document and a first document type definition for the first source document, the first source document conforming to the first document type definition;

receive as input a target document type definition, the target document type definition being different from the first document type definition;

compare the first document type definition and the target document type definition to identify common patterns, common patterns being patterns common to the first document type definition and the target document type definition, wherein to identify common patterns includes to identify an element that is common to the first and the target document type definitions but has a different name in the first document type definition than in the target document type definition; and

use the common patterns identified by comparing the first and the target document type definitions to map automatically without user intervention elements and sub-elements in the first document type definition of the first source document to recode the first source document

according to the target document type definition to equivalent elements and sub-elements, including instructions operable to cause the computer system to change a first tag name of a first element in the first source document to a different second tag name.

26-27. (Cancelled)

28. (Currently Amended) A computer system comprising:

a storage device for storing a source document and a set of source documents, the source document having a format different from that of the set of source documents, the source document conforming to a first document type definition and the documents in the set of source documents each conforming to a target document type definition; and

a computer processor configured by a mapping program to identify patterns common to the source document and the set of source documents by comparing the first document type definition and the target document type definition and map, without user intervention, elements and sub-elements in the common pattern of the source document to equivalent elements and sub-elements in the common pattern of the set of source documents, wherein to identify patterns includes to identify an element that is common to the first and second source documents but has a different name in the first source document than in the second source document and wherein to map elements includes to map a first element in the first source document to a second element in the second source document based on the identified common patterns, the first element and the second element having different element names.

29. (Previously presented) The computer program of claim 25, further comprising instructions operable to cause a computer system to:

produce the first document type definition for the first source document if a document type definition for the first source document does not already exist.

30. (Previously presented) The computer program of claim 25, wherein the instructions operable to cause a computer system to identify common patterns comprise instructions operable to cause a computer system to:

perform pattern matching between structures defined by the first document type definition and structures defined by the second document type definition.

31. (Cancelled)

32. (Previously presented) The computer program of claim 25, wherein the instructions operable to cause a computer system to identify patterns common to the first and second source documents further comprises instructions operable to cause a computer system to:

use heuristics to find common structure in the first document type definition and the second document type definition.

33. (Cancelled)

34. (Currently Amended) A computer program residing on a computer-readable medium for converting the format of a source document to the format of a set of source documents, the set of source documents having the first source document, the computer program comprising instructions operable to cause a computer system to:

identify patterns common to the source document and the set of source documents, wherein to identify patterns includes to identify an element that is common to the first and second source documents but has a different name in the first source document than in the second source document;

map, without user intervention, elements and sub-elements in the common pattern of the source document to equivalent elements and sub-elements in the common pattern of the set of source documents, including mapping a first element in the first source document to a second element in the second source document based on the identified common patterns, the first element and the second element having different element names; and

replace tag names for the each of the elements and sub-elements in common pattern of the source document with the equivalent tag names of the elements and sub-elements in common pattern of the set of source documents.

35. (Previously presented) The computer program of claim 34, wherein the instructions causing a computer system to identify patterns common to the source document and the set of source documents comprises instructions causing a computer system to:

examine document type definitions for the source document and the set of source documents.

36. (Previously presented) The computer program of claim 35, further comprising instructions causing a computer system to:

produce the document type definition for the source document if the document type definition for the source document does not already exist.

37-40. (Cancelled)



### REMARKS

This amendment is being filed concurrently with a Request for Continued Examination. Claims 14, 16-18, 20, 22-25, 28-30, 32 and 34-36 are pending, of which claims 14, 22, 25, 28 and 34 are independent. In this amendment, claims 14, 22, 25, 28 and 34 have been amended, and claims 37-40 have been cancelled. Support for these amendments may be found in the application at, for example, page 4, lines 21-22. No new matter has been added.

In the final action of September 22, 2005, claims 14, 16-18, 20, 22-25, 28-30, 32 and 34-49 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Motoyama (U.S. Patent No. 6,009,436) in view of Takasawa (UK Patent Application No. GB 2,307,571 A). The Notice of Panel Decision from Pre-Appeal Brief Review of December 28, 2005 maintained the rejections. The applicant respectfully traverses the rejections and requests reconsideration in view of the amendments to the claims and the following remarks.

#### Claims 14, 25, and 28.

As amended, claim 14 recites using common patterns identified by comparing two document type definitions (DTDs) – a first DTD and a target DTD – to map without user intervention elements in a source document that had conformed to the first DTD so as to recode a document according to the target DTD. Neither Motoyama nor Takasawa disclose this feature.

Motoyama discloses the use of two DTDs; however, the DTDs are used as inputs to an editor used by a user to define a mapping. This is clear from the Abstract of Motoyama: “The present invention operates as a user tool by accepting interactive input from a user of a source input, by processing the input to display the source input in a format for accepting and processing user commands to create or edit a transformation map of source components to target components.” Motoyama describes the map editor that a user access to create or edit a mapping in col. 16, line 34 to col. 17, line 25. *See, also*, Motoyama, FIGS. 12B-12C (illustrating exemplary windows for the map editor).

As such, Motoyama does not describe or suggest using the common patterns identified by comparing the first and the target document type definitions to map without user intervention elements and sub-elements of the first document type definition in the first source document to recode the first source document according to the target document type definition to equivalent

elements and sub-elements, including changing a first tag name of a first element in the first source document to a different second tag name, as recited in claim 14.

Takasawa does not remedy the failure of Motoyama to describe or suggest the subject matter of claim 14. Nor does the Examiner assert that Takasawa describes or suggests using common patterns to map without user intervention elements in a source document as to recode the source document according to the target DTD, as recited in amended claim 14.

Accordingly, neither Motoyama, Takasawa, nor any proper combination of the references, describes or suggests suggest using the common patterns identified by comparing the first and the target document type definitions to map without user intervention elements and sub-elements of the first document type definition in the first source document to recode the first source document according to the target document type definition to equivalent elements and sub-elements, including changing a first tag name of a first element in the first source document to a different second tag name, as recited in claim 14.

For at least these reasons, applicant requests reconsideration and withdrawal of the rejection of claim 14 and claims 16-18 and 20, which depend directly or indirectly from claim 14.

A corresponding feature is recited in independent claims 25 and 28, which each have been amended with amendments corresponding to those made to claim 14. This feature is recited in independent claim 25 in this way: "use the common patterns identified by comparing the first and the target document type definitions to map without user intervention elements and sub-elements in the first document type definition of the first source document to recode the first source document according to the target document type definition to equivalent elements and sub-elements."

This feature is recited in independent claim 28 in this way: "a computer processor configured by a mapping program to identify patterns common to the source document and the set of source documents by comparing the first document type definition and the target document type definition and map, without user intervention, elements and sub-elements in the common pattern of the source document to equivalent elements and sub-elements in the common pattern of the set of source documents, wherein to identify patterns includes to identify an element that is

common to the first and second source documents but has a different name in the first source document than in the second source document and wherein to map elements includes to map a first element in the first source document to a second element in the second source document based on the identified common patterns.” Claim 28 recites automatic mapping in the mapping program that configures the computer processor “to identify patterns ... and map elements . . . to equivalent elements . . . ,” i.e., to do so without user intervention.

For the reasons noted above with respect to independent claim 14, applicant respectfully requests reconsideration and withdrawal of the rejection of claims 25 and 28, and their respective dependent claims.

Claims 22 and 34.

As amended, independent claims 22 and 34 each recite mapping elements and sub-elements in the common pattern of the source document to equivalent elements and sub-elements in the common pattern of the set of source documents, including mapping a first element in the first source document to a second element in the second source document based on the identified common patterns, the first element and the second element having different element names, wherein mapping comprises mapping without user intervention.

For the reasons noted above with respect to independent claim 14, applicant respectfully requests reconsideration and withdrawal of the rejection of claims 25 and 34, and their respective dependent claims.

**Conclusion**

Applicant submits that all claims are in condition for allowance.

Applicant believes that all of the pending claims issues have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this reply should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this

reply, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

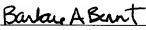
Pursuant to 37 CFR §1.136, applicant hereby petitions that the period for filing an appeal brief responsive to the Notice of Appeal filed on December 14, 2005, be extended for one month to and including March 14, 2006.

The fee in the amount of \$910.00 in payment of the Request for Continued Examination fee (\$790.00) and the Petition for Extension of Time fee (\$120.00) is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization.

Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: March 14, 2006

  
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